

WHAT IS CLAIMED IS

1. A system for the duplication of data onto CD-R disks, the system comprising:

a vacuum pump; and

a copy unit, comprising:

at least one set of multiple stacked recordable disk drives;

a pivotal transport tower;

a set of disk spindle members, arranged in a symmetric circular pattern around the pivotal transport tower, maintaining the order and placement of the stacked compact disks during the copy operations;

an arm, connected to the pivotal transport tower and the vacuum pump, the arm transporting a CD-R disk located on the top of a stack held in place by one disk spindle member to any stacked recordable disk drive member, the arm capable of transporting a CD-R disk located in any stacked recordable disk drive member to the top of any stack held in place by one of the disk spindle members.

2. The system of Claim 1, wherein the number of multiple stacked recordable disk drives may be increased or decreased by the user.

3. The system of Claim 2, wherein the disk spindle members may be removed from or re-attached to the copy unit.

4. The system of Claim 3, wherein the copy unit has an air filtration unit, the air filtration unit comprising:

a set of electric fan members, the electric fan members drawing air into the inside of the copy unit;

5 an air filter, the air filter positioned along the inside vertical face of the copy unit and filtering the air drawn into the copy unit by the electric fan members;

a set of outflow vents located on the copy unit, the outflow vents allowing air drawn through the copy unit by the electric fan members to exit the copy unit.

10 5. The system of Claim 4, wherein a host computer containing computer software and memory is connected to the copy unit, the computer software providing a user interface for output diagnostic messages of the copy unit through peripherals connected to the host computer.

6. The system of Claim 5, wherein a microprocessor located inside the copy unit controls movement of the pivotal transport tower and the arm.

7. The system of Claim 6, wherein the microprocessor is electrically connected to the host computer, the microprocessor sending electrical signals to the host computer and the microprocessor receiving electrical signal commands from the host computer, the computer software providing a user interface for

control of the copy unit.

8. The system of Claim 7, wherein the binary data to be copied is located on one or more master compact disks and is transferred to the memory of the host computer by at least one stacked recordable disk drive member.

9. The system of Claim 8, wherein the computer software and the microprocessor provide a user interface for user input copy instructions for the control of each master compact disk during the duplication of the data when each master compact disk is held by a disk spindle member on the copy unit.

10. The system of Claim 9, wherein the copy unit has a disk reject area, the arm capable of transporting defective CD-R disks, the disk pickup head receiving electrical signal commands from the microprocessor, the microprocessor receiving an electrical signal indicating a CD-R disk located in a stacked recordable disk drive member is defective, the electrical signal sent to the microprocessor by the stacked recordable disk drive member after the stacked recordable disk drive member attempts to read the CD-R disk.

11. The system of Claim 10, wherein the copy unit has a print application area, the arm transporting CD-R disks to the print application area for application of symbols on the upper face of the CD-R disk, the arm then transporting the labeled disk to top of

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any stack held in place by one of the disk spindle members.

12. A compact disk recording system for the duplication of binary data onto CD-R disks, the system comprising:

lifting means for engaging and transporting a CD-R disk in a vertical direction;

a set of multiple stacked recordable disk drives;

transport means for transporting a CD-R disk in a horizontal plane while the CD-R disk is engaged by the lifting means;

disk stacking means for holding CD-R disks at least two stacks, the lifting means and rotating transport means transporting a CD-R disk located at the top of one of the stacks to any multiple stacked recordable disk drive member, the lifting means and rotating transport means transporting any CD-R disk located in one of the multiple stacked recordable disk drives to the top of one of the stacks.

13. The system of Claim 12, wherein the system has master disk data transfer means for reading master data located on one or more compact disks and then transferring the master data onto any CD-R disk.

14. The system of Claim 13, wherein the system has user interface means for pre-programming the control of the duplication of data.

15. The system of Claim 14, wherein the system has defective CD-R disk detection means for detecting defective CD-R disks and ejection means for ejecting defective CD-R disks to an area away from the disk stacking means.

5 16. The system of Claim 15, wherein the system has labeling means for the application of symbols on the upper face of the CD-R disks and transporting the labeled disk to the top of one of the stacks.

17. A system for the duplication of binary data onto CD-R disks having a recording side and a printing side, the system comprising:

a copy unit having
at least one set of multiple stacked recordable disk
drives;

a pivotal transport tower;

a set of disk spindle members, arranged in a symmetric circular pattern around the pivotal transport tower, maintaining the order and placement of the stacked compact disks during the copy operations;

20 an arm, connected to the pivotal transport tower the arm transporting a CD-R disk located on the top of a stack held in place by one disk spindle member to any stacked recordable disk drive member, the arm capable of transporting a CD-R disk located

in any stacked recordable disk drive member to the top of any stack held in place by one of the disk spindle members.

18. The system of Claim 17, wherein the number of multiple stacked recordable disk drives may be increased or decreased by the user.

19. The system of Claim 18, wherein the disk spindle members may be removed from or re-attached to the copy unit.

20. The system of Claim 17, wherein a host computer containing computer software and memory is connected to the copy unit, the computer software providing a user interface for output diagnostic messages of the copy unit through peripherals connected to the host computer.

21. The system of Claim 20, wherein a microprocessor located inside the copy unit controls movement of the pivotal transport tower and the arm.

22. The system of Claim 21, wherein the microprocessor is electrically connected to the host computer, the microprocessor sending electrical signals to the host computer and the microprocessor receiving electrical signal commands from the host computer, the computer software providing a user interface for

control of the copy unit.

23. The system of Claim 20, wherein the binary data to be copied is located on one or more master compact disks and is transferred to the memory of the host computer by at least one stacked recordable disk drive member.

24. The system of Claim 23, wherein the computer software and the microprocessor provide a user interface for user input copy instructions for the control of each master compact disk during the duplication of the data when each master compact disk is held by a disk spindle member on the copy unit.

25. The system of Claim 24, wherein the copy unit has a disk reject area, the arm capable of transporting defective burned CD-R disks, the disk pickup head receiving electrical signal commands from the microprocessor, the microprocessor receiving an electrical signal indicating a burned CD-R disk located in a stacked recordable disk drive member is defective, the electrical signal sent to the microprocessor by the stacked recordable disk drive member after the stacked recordable disk drive member attempts to read the burned CD-R disk.

26. The system of Claim 17, wherein the copy unit has a print application unit, the arm transporting a CD-R disk to the print application unit for printing on the printing side of the CD-R disk, the arm then transporting the printed disk to top of any

stack held in place by one of the disk spindle members.

27. The system of claim 26, wherein the print application unit includes means for drying a printed disk.

28. The system of claim 27 wherein the copy unit has means
5 for circulating air, and wherein the print application units has
vent means located to optimize drying of a printed disk in the
print application unit by air circulating means of the copy unit.

29. The system of claim 27 wherein the drying means includes
a thermal element.

10 30. The system of claim 26, wherein the CD-R disks are
preprinted and include a preprinted orientation mark, and wherein
the print application unit includes means for detecting the
preprinted orientation mark, computer program means for determining
the angular location of the orientation mark, and computer program
means for rotationally orienting a to-be-printed image in
registration with the preprinted orientation mark.

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